

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method for configuring addresses in a packet switched data communication system, the method comprising:
~~providing a logical network with at least two network elements, a network element of the at least two network elements comprising at least one sub-element;~~
configuring a temporary address for an interface of a sub-element ~~of the at least one sub-element~~ of a network element, the network element comprising a control module and the sub-element;
retrieving an identifier of the network element from the control module; and
defining a second address for the interface of the sub-element based on ~~by including~~ the retrieved identifier of the network element ~~to the temporary address~~ and the temporary address.
2. (Currently amended) A method according to claim 1, wherein the ~~configuring step comprises configuring~~ temporary address is a local link layer address for the interface of the sub-element.
3. (Currently amended) A method according to claim 1, wherein the ~~configuring step comprises configuring~~ the temporary address for the interface of the sub-element is configured based on the position of the sub-element ~~hardware location information~~ in the network element.
4. (Currently amended) A method according to claim 1, wherein the ~~configuring step comprises configuring~~ the temporary address for the interface of the sub-element is configured based on a ~~module identifier~~ serial number of the sub-element.
5. (Currently amended) A method according to claim 1, ~~further comprising~~ providing wherein the ~~[[a]] control module is sub-element~~ configured to access the identifier of the network element without ~~a need to communicate~~ communicating with other network elements.

6. (Currently amended) A method according to claim 5, wherein the control module is configured to store ~~further comprising storing~~ the identifier of the network element in a memory of the control ~~sub-element~~ module.

7. (Currently amended) A method according to claim ~~[[5]]~~ 1, ~~wherein the retrieving step comprises retrieving the identifier of the network element from the control sub-element.~~ further comprising verifying the uniqueness of the second address using a duplicate address detection process.

8. (Currently amended) A method according to claim 1, wherein ~~the retrieving step comprises retrieving~~ the identifier of the network element is retrieved from the control module using the temporary address as a unique address to carry out an automatic address resolution procedure locally in the network element.

9. (Currently amended) A method according to claim 1, wherein ~~the step of defining the~~ defined second address comprises ~~defining~~ a network layer address for the interface of the sub-element.

10. (Currently amended) A method according to claim 1, further comprising blocking, inside ~~[[an]]~~ the network element, all data packets ~~lacking~~ that do not contain the identifier of the network element.

11. (Currently amended) A method according to claim 1, further comprising enabling the interface of the sub-element for network element external communication after ~~at the earliest when the~~ second address for the interface of the sub-element is defined.

12. (Currently amended) A method according to claim 1, further comprising retrieving a network portion identifying ~~[[the]]~~ a logical network and ~~continuing the address configuration by~~ including the network portion ~~[to]]~~ with the second address of the interface of the sub-element.

13. (Currently amended) A method according to claim 12, wherein the ~~providing step comprises providing~~ the logical network is a layer 2 switched local area network with at least two ~~transceiver~~ network elements, ~~a transceiver network element of the~~

~~at least two transceiver network element comprising a control module and at least one other module.~~

14. (Currently amended) A computer program product comprising program code means for performing ~~any of the steps according to~~ the method of claim 1, the program code embodied on a computer-readable memory and executable by a processor of the network element~~when program code is run on a computing means.~~

15. (Currently amended) A network element comprising:

~~At least one~~ a sub-element;

a control module;

a processor; and

~~a configuring means configured to configure~~ a computer-readable memory operably coupled to the processor, the computer-readable memory comprising instructions that, upon execution by the processor, perform operations comprising

configuring a temporary address for an interface of [[a]] the sub-element; ~~of the at least one sub-element~~

retrieving an identifier of the network element from the control module; and

~~to define an~~ defining a second address for the interface of the sub-element based on ~~by including an~~ the retrieved identifier of the network element and the temporary address ~~retrieved by a retrieving means; and the retrieving means configured to retrieve the identifier of the network element.~~

16. (Currently amended) A network element according to claim 15, wherein ~~the configuring means is configured to configure~~ temporary address is a local link layer address for the interface of the sub-element.

17. (Currently amended) A network element according to claim 15, wherein ~~the configuring means is configured to configure~~ the temporary address is configured based on the position of the sub-element ~~hardware location information of the sub-element~~ in the network element.

18. (Currently amended) A network element according to claim 15, wherein ~~the configuring means is configured to configure~~ the temporary address is configured based on a ~~module identifier~~ serial number of the sub-element.

19. (Currently amended) A network element according to claim 15, ~~further comprising a~~ wherein the control module is sub-element configured to access the identifier of the network element without a ~~need to communicate~~ communicating with other network elements.

20. (Currently amended) A network element according to claim 19, wherein the control sub-element module is ~~comprising a memory~~ configured to store the identifier of the network element.

21. (Currently amended) A network element according to claim 19, ~~wherein the retrieving means is configured to retrieve the identifier of the network element from the control sub-element~~ wherein the operations further comprise verifying the uniqueness of the second address using a duplicate address detection process.

22. (Currently amended) A network element according to claim 15, wherein ~~the retrieving means is configured to retrieve~~ the identifier is retrieved from the control module of the network element using the temporary address as a unique address to carry out an automatic address resolution procedure locally in the network element.

23. (Currently amended) A network element according to claim 15, wherein ~~the configuring means is configured to configure~~ defined second address comprises a network layer address for the interface of the sub-element.

24. (Currently amended) A network element according to claim 15, ~~further comprising~~ wherein the operations further comprise blocking means configured to block, inside the network element, all data packets ~~lacking~~ that do not contain the identifier of the network element.

25. (Currently amended) A network element according to claim 15, wherein the operations further comprise ~~retrieving means is further configured to retrieve~~ a network

portion identifying a logical network and ~~continuing an address configuration of the configuring means by~~ including the network portion [to]] with the second address of the interface of the sub-element.

26. (Currently amended) A network element according to claim 16, wherein the local link layer address is based on a 48-bit media access control identifier format.

27. (Original) A network element according to claim 23, wherein the network layer address is one of a link-local Internet Protocol version 6 address based on an EUI-64 identifier and an Internet Protocol version 4 address using a dynamic host configuration protocol.

28. (Currently amended) A network element according to claim 15, wherein the network element ~~[[being]] is a transceiver network element and comprising a control module and at least one other module.~~

29. (Currently amended) A communication system comprising:
a logical network comprising at least two network elements, a network element of the at least two network elements comprising at least one sub-element and a control module;
a configuring means ~~configured to configure~~ for configuring a temporary address for an interface of a sub-element of the at least one sub-element and to define an address for the interface of the sub-element based on by including an identifier of the network element retrieved by a retrieving means from the control module and the temporary address;
~~the retrieving means adapted to retrieve the identifier of the network element.~~

30. (New) A communication system according to claim 29, wherein the defined address further comprises a network portion identifying the logical network.

31. (New) A communication system according to claim 29, wherein the defined address comprises one of a link-local Internet Protocol version 6 address based on an EUI-64 identifier and an Internet Protocol version 4 address using a dynamic host configuration protocol.

32. (New) A communication system according to claim 30, wherein the temporary address is based on a 48-bit media access control identifier format.

33. (New) A method of creating a link layer address for a module located within a base station, the method comprising:

determining if information about a position of a module within a base station is available;

if the information about the position of the module within the base station is available, creating a link layer address based on the position of the module; and

if the information about the position of the module within the base station is not available, creating the link layer address based on a serial number of the module.

34. (New) A method according to claim 33, further comprising:

retrieving an identifier of the base station from a control module;

defining an address for the interface of the module based on the retrieved identifier and the temporary address; and

verifying the uniqueness of the address using a defined address detection process.

35. (New) A method according to claim 34, wherein the defined address further comprises a network portion identifying a logical network.

36. (New) A method according to claim 35, wherein the defined address comprises one of a link-local Internet Protocol version 6 address based on an EUI-64 identifier and an Internet Protocol version 4 address using a dynamic host configuration protocol.

37. (New) A method according to claim 34, further comprising enabling the interface of the module for external communication with a logical network after verifying the uniqueness of the address.

38. (New) A method according to claim 33, wherein the link layer address is based on a 48-bit media access control identifier format.